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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,235	09/03/2003	Kang Soo Seo	1740-000048/US	4845
30593 7590 05/18/2007 HARNES, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER CHOI, MICHAEL P	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 05/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/653,235	Applicant(s) SEO ET AL.	
	Examiner Michael P. Choi	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/21/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

1. The drawings are objected to because **Figure 3** discloses "Playback of Moive & Still" wherein 'Moive' should be changed to 'Movie'. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because it does not contain more than 50 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 5-7 and 9 are objected to because of the following informalities:

Claims 5-7 and 9 recite "*the* one of the playitem field" wherein "*the*" from "*the* one" should be removed since it lacks antecedent basis.

Appropriate correction is required.

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Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-14 define a recording medium embodying functional descriptive material as well as non-functional descriptive material such a data structure, per se. However, the claims do not define a computer-readable medium or memory and is thus non-statutory for that reason. That is, the scope of the presently claimed recording medium can be paper on which a program is written.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Maruyama et al. (US 6,385,289 B1).

Regarding Claim 1, Maruyama et al. teaches a recording medium having a data structure for managing reproduction of at least still images recorded on the recording medium, comprising:

- a data area storing at least one still image in a first file and audio data in a second file (see Fig. 3); and

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- a playlist area storing at least one playlist, the playlist linking the first and second files (in at least Figs. 3, 8, 25 wherein the control information stores a program chain (PGC) linking first and second files of Video Object Units (VOBUs) – Fig. 27).

Regarding Claim 2, Maruyama et al. teaches the recording medium of claim 1, wherein the playlist including navigation information providing presentation information regarding the first and second files (Fig. 13; Col. 15, lines 31+).

Regarding Claim 3, Maruyama et al. teaches the recording medium of claim 2, wherein the playlist includes first navigation information providing presentation information regarding the still image in the first file, and second navigation information providing presentation information regarding audio data in the second file (Fig. 13 – VOBUs (#n) containing a first file and VOBUs (#n+1) containing a second file in the PACKS section; Col. 15, lines 31+).

Regarding Claim 4, Maruyama et al. teaches the recording medium of claim 3, wherein one of a playitem field and a sub-playitem field provides the first navigation information (Fig. 13 – VOBUs (#n) having a cell (Fig. 27) provides NV_PCK#n; see also Fig. 12).

Regarding Claim 5, Maruyama et al. teaches the recording medium of claim 4, wherein the one of the playitem field and the sub-playitem field (Fig. 13 – VOBUs (#n) having a cell (Fig. 27) provides NV_PCK#n; see also Fig. 12) includes an indicator indicating that the one of the playitem field and the sub-playitem field provides information for still image presentation (Fig. 13 wherein each Navigation Pack has presentation control information; Col. 15, lines 1+).

Regarding Claim 6, Maruyama et al. teaches the recording medium of claim 4, wherein the one of the playitem field and the sub-playitem field includes an indicator indicating a duration for displaying the still image (Col. 16, lines 56+).

Regarding Claim 7, Maruyama et al. teaches the recording medium of claim 4, wherein the one of the playitem field and the sub-playitem field includes an indicator indicating whether to display the still image for an infinite duration (Col. 16, lines 56+ - the conventional displaying of duration indicates whether to display for an "infinite duration").

Regarding Claim 8, Maruyama et al. teaches the recording medium of claim 7, wherein the indicator indicates to display the still image for an infinite duration (Col. 16, lines 56+ - the conventional displaying of duration indicates whether to display for an "infinite duration").

Regarding Claim 9, Maruyama et al. teaches the recording medium of claim 4, wherein the one of the playitem field and the sub-playitem field includes identifiers identifying a clip of data including the still image (Fig. 12 – each pack includes header identifying clip of data in Video Pack Header).

Regarding Claim 10, Maruyama et al. teaches the recording medium of claim 4, wherein one of a playitem field and a sub-playitem field provides the second navigation information (Fig. 13 – VOB_U(#n+1) provides NV_PCK_{#n+1}).

Regarding Claim 11, Maruyama et al. teaches the recording medium of claim 10, wherein the one of a playitem field and a sub-playitem field providing the first navigation information is different from the one of a playitem field and a sub-playitem field providing the second navigation information (Fig. 13 – VOB_U(#n) as opposed to VOB_U(#n+1) each containing respective navigation pack NV_PCK).

Regarding Claim 12, Maruyama et al. teaches the recording medium of claim 11, wherein the playlist further includes mark information, and the mark information includes a mark pointing to the still picture (Fig. 33 – the PGC contains management information having a search pointer of a PGC correlating to a cell (Fig. 27) containing a VOB_U).

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Regarding Claim 13, Maruyama et al. teaches the recording medium of claim 3, wherein the playlist further includes mark information, the mark information includes a mark pointing to the still picture (Fig. 33 – the PGC contains management information having a search pointer of a PGC correlating to a cell (Fig. 27) containing a VOB).

Regarding Claim 14, Maruyama et al. teaches a recording medium having a data structure for managing reproduction of at least still images recorded on the recording medium, comprising (in at least Figs. 1, 2A, 2B, 25):

- a data area storing at least one still image and audio data in separate files (see Fig. 3 in the audio & video data area);
- a playlist area including a playlist (in at least Figs. 3, 8, 25 wherein the control information stores a program chain (PGC) linking first and second files of Video Object Units (VOBUs) – Fig. 27), the playlist including a first one of a playitem and a sub-playitem that provides navigation information regarding the still image (Fig. 13 – VOB (#n) having a cell (Fig. 27) provides NV_PCK#n; see also Fig. 12), the playlist including a second one of a playitem and a sub-playitem that provides navigation information regarding the audio data (Fig. 13 – VOB(#n) as opposed to VOB (#n+1) each containing respective navigation pack NV_PCK).

Regarding Claim 15, Maruyama et al. teaches a method of reproducing a data structure for managing reproduction of at least still images recorded on a recording medium, comprising:

- reproducing at least one playlist from the recording medium (in at least Col. 2, Line 30 – Col. 3 Lines 15 – playback of program chains – Fig. 34), the playlist linking first and second files, the first file including at least one still image and the second file including audio data (in at least Figs. 3, 8, 25 wherein the control information stores a program chain (PGC) linking first and second files of Video Object Units (VOBUs) each having separate image and audio data– Fig. 27).

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Regarding Claim 16, Maruyama et al. teaches an apparatus for reproducing a data structure for managing reproduction of at least still images recorded on a recording medium, comprising:

- a driver for driving an optical reproducing device to reproduce data recorded on the recording medium (Fig. 19, 32);
- a controller for controlling the driver (Fig. 19, 36) to reproduce at least one playlist from the recording medium (in at least Col. 2, Lines 30-35 – playback of program chains – Fig. 34), the playlist linking first and second files, the first file including at least one still image and the second file including audio data (in at least Figs. 3, 8, 25 wherein the control information stores a program chain (PGC) linking first and second files of Video Object Units (VOBUs) each having separate image and audio data– Fig. 27).

Regarding Claim 17, Maruyama et al. teaches a method of recording a data structure for managing reproduction of at least still images recorded on a recording medium, comprising:

- recording a first file including at least one still image and a second file including audio data in the recording medium (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area);
and
- recording at least one playlist in the recording medium (in at least Col. 2, Line 30 – Col. 3 Lines 15 – recording of program chains – in at least Figs. 18, 34) linking the first and second files (in at least Figs. 3, 8, 25 wherein the control information stores a program chain (PGC) linking first and second files of Video Object Units (VOBUs) each having separate image and audio data– Fig. 27).

Regarding Claim 18, Maruyama et al. teaches an apparatus for recording a data structure for managing reproduction of at least multiple reproduction path video data on a recording medium, comprising:

- a driver for driving an optical recording device to record data on the recording medium (Fig. 19, 32 – disc drive);

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- an encoder for encoding at least multiple reproduction path video data (Fig. 19, 50 – encoder);
- and a controller (Fig. 19, 36 – data processor) for controlling the driver to record a first file including at least one still image and a second file including audio data in the recording medium (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area), and for controlling the driver to record at least one playlist in the recording medium (in at least Col. 2, Line 30 – Col. 3 Lines 15 – recording of program chains – in at least Figs. 18, 34), the playlist linking the first and second files (in at least Figs. 3, 8, 25 wherein the control information stores a program chain (PGC) linking first and second files of Video Object Units (VOBUs) each having separate image and audio data– Fig. 27).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- US 5,870,523 – Recording medium on which navigation data is recorded
 - US 5,854,873 – Method and apparatus for encoding bit-stream with plural system streams
 - US 5,999,698 – Multi-angle block reproduction system
 - US 5,884,004 – Optical disc for generating a bit-stream containing video objects

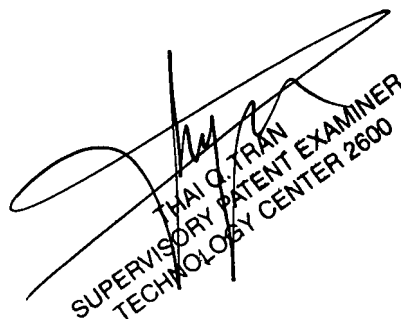
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Choi whose telephone number is (571) 272-9594. The examiner can normally be reached on Monday - Friday 8:00AM - 5:30PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MC



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